

one of said analog data units having said selected analog data at said player means, and  
 said player means providing said selected analog data and corresponding digital application data in a format adapted or display,  
 said player means comprising a mother reel and a plurality of satellite reels,  
 said mother reel having a plurality of tapes wound in a nested spiral relationship thereon, each of said tapes having the same operational length,  
 each of said satellite reels being associated with one of said plurality of tapes, an end of each of said plurality of tapes being connected to a separate one of said satellite reels,  
 said mother reel and said satellite reels each being adapted to permit the simultaneous winding of each of said tapes between said mother reel and the one of said satellite reels with which each tape is associated.  
 6. A data storage memory system comprising:  
 multiple data storage pack, each of said packs comprising:  
 (a) a first data storage media containing a plurality of data storage units arranged in a predetermined matrix, said data storage units adapted to provide data in a format having relatively high capacity,  
 (b) a second data storage media electrically independent of said first data storage media mechanically attached to said first data storage media, said second data storage media including digital application data and digital control data, said digital control data serving to identify and locate selected data in said data storage units of said matrix and to corresponding portions of said digital application data,  
 first and second ones of said data storage packs arranged in parallel stands,  
 player means comprising multiple players positioned between said first and second stands, said players adapted to play said data storage units of said matrix,  
 mechanical means responsive to said digital control data and coupled to said data storage units to position the one of said data storage units having selected data at said player means,  
 said player means providing said selected data and corresponding digital application data in a format adapted for display, said mechanical means being a robotic device for carrying a predetermined data storage unit from a predetermined matrix location on one of a pair of parallel stand storage matrices to a work station, the two storage matrices having accessing faces opposed to one another and having an end effector with a gripper end and a body end, said gripper end being adapted to grip a predetermined unit at a predetermined location in one of the matrices when appropriately aligned therewith, said end effector being mounted for vertical and horizontal movement along a plane positioned between and parallel to the accessing faces of the matrices, motive means for simultaneously moving said end effector in a vertical and horizontal direction in said plane and to rotate said end effector 180 degrees about a vertical axis while said end effector is moving along said plane,  
 a cable to transmit power and signal from a stationary to said end effector,

means to avoid said cable being jammed by said moving end effector.

7. A data storage pack comprising:

a first data storage media containing a plurality of data storage units arranged in a predetermined matrix, and

a second data storage media electrically independent of said first data storage media mechanically attached to said first data storage media,

said data storage units of said first data storage media adapted to provide analog data,

said second data storage media adapted to provide digital data in a format permitting relatively high accessing speed,

said second data storage media containing digital application data and digital control data, said digital control data serving to locate and select data in said data storage units of said matrix and to correlate the data from said matrix to corresponding portions of said digital application data, each of said analog data units comprising a plurality of disks axially stacked relative to one another, each of said disks having a central opening defined by an inner rim,

an electric motor for each of said multiple disk analog data units, said electric motor comprising:

(a) a plurality of rotors and plurality of stators,

(b) each of said rotors being associated with a separate one of said stators,

(c) said stators being axially displaced from one another and being connected to one another on a common axis,

(d) each of said stators having a plurality of radially extending poles and having a winding wound around said poles,

(e) said windings for each of said stators being independent of one another and being adapted to be separately energized,

(f) each of said rotors being an annular permanent magnet positioned radially outboard from the one of said stators with which it is associated,

(g) said rotors being mechanically independent of one another so that each of said rotors can rotate independently of one another, whereby energization of the winding on one of said stators will rotate only the associated one of said rotors.

8. A data storage memory system comprising:

at least one data storage pack, said pack comprising:

(a) a first data storage media containing a plurality of data storage units arranged in a predetermined matrix, said data storage units adapted to provide data in a format having relatively high capacity,

(b) a second data storage media electrically independent of said first data storage media mechanically attached to said first data storage media, said second data storage media including digital application data and digital control data, said digital control data serving to identify and locate selected data in said data storage units of said matrix and to corresponding portions of said digital application data,

player means adapted to play said data storage units of said matrix, and

mechanical means responsive to said digital control data and coupled to said analog tape to position the one of said analog data units having said selected analog data at said player means, and